

CLAIMS

- 1 A metal oxide particle comprising a core part relatively rich in a ceria-zirconia solid solution and a surface layer relatively rich in a second metal oxide.
- 5 2 The metal oxide particle according to claim 1, wherein said core part and said surface layer each comprises a plurality of primary particles.
- 3 The metal oxide particle according to claim 1 or 2, wherein said second metal oxide is ceria.
- 10 4 The metal oxide particle according to claim 1 or 2, wherein said second metal oxide is zirconia.
- 5 The metal oxide particle according to claim 3 or 4, wherein said surface layer further comprises an oxide of at least one metal selected from the group consisting of alkaline earth metals and rare earths.
- 15 6 An exhaust gas purifying catalyst comprising a noble metal supported on the metal oxide particle according to any one of claims 1 to 5.
- 7 An exhaust gas purifying catalyst comprising platinum supported on the metal oxide particle according to claim 3.
- 20 8 An exhaust gas purifying catalyst comprising rhodium supported on the metal oxide particle according to claim 4.
- 25 9 A process for producing a metal oxide particle comprising a core part relatively rich in a ceria-zirconia solid solution and a surface layer relatively rich in a second metal oxide, the process comprising:
- 30 providing a sol containing at least a population of ceria-zirconia solid solution colloid particles and a population of second metal oxide colloid particles differing in the isoelectric point with each other,
- 35 adjusting the pH of said sol to be closer to the isoelectric point of said population of ceria-zirconia solid solution colloid particles than to the isoelectric point of said population of second metal

oxide colloid particles, thereby aggregating said population of ceria-zirconia solid solution colloid particles,

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to the isoelectric point of said population of second
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point of said population of ceria-zirconia solid solution
colloid particles, thereby aggregating said population of
second metal oxide colloid particles onto said population
10 of ceria-zirconia solid solution colloid particles
aggregated, and

drying and firing the obtained aggregate.